

REMARKS

Reconsideration and allowance of this application, as amended, is respectfully requested.

This Amendment is in response to the Office Action dated April 24, 2007. By the present amendment, the independent claims 17 and 20 have been replaced by new independent claims 24 and 27, dependent claims 18, 19 and 21 – 23 have been amended to depend on the new independent claims and new dependent claims 25, 26, 28 and 29 have been added to define further features of the present invention.

Reconsideration and removal of the objection to the claims and the 35 USC §112, second paragraph, rejection is respectfully requested. By the present Amendment, the issues raised in the claim objection and the 35 USC §112, second paragraph, rejection have now been addressed, and, accordingly, removal of these rejections is earnestly solicited.

Reconsideration and removal of the 35 USC §103 rejection of the claims over the combination of the references to Dasse (USP 5,399,505) and Liu (USP 5,177,439) is also respectfully requested. By the present Amendment, the new independent claims 24 and 27 have been added to emphasize distinctions of the present invention over the cited references. In particular, these new independent claims define features of the invention, shown, for example, in Figs. 2A and 2B and discussed, for example, on pages 12 and 13 of the Specification, particularly beginning at page 12, line 16 et seq. More specifically, referring to Figs. 2A and 2B, it can be seen that an arrangement is provided in which contact terminals 4 are found to be surrounded by a first metal film 30a of a probe sheet 6. These contact terminals are provided to permit testing of semiconductor elements 2 via the

electrodes 3 (e.g., see Fig. 1). In addition to the first metal film 30a, a second metal film 30b is formed to surround the first metal film 30a of the probe sheet. Therefore, as discussed on page 12, lines 16 et seq.:

“Then, a circular metal film 30a and a metal film 30b are formed (in the area corresponding to the frame 21) in such a manner as to surround the contact terminals 4 of the probe sheet 6 in double layers. Thus, a structure is realized in which the positional accuracy of the contact terminals is secured by the inner metal film 30a and the copy operation is possible while tilting the portion lined with the metal film at a delicate angle to the wafer surface to be contacted, in the flexible probe sheet area free of the metal film 30 between the metal film 30b formed in the area corresponding to the frame 21 and the inner metal film 30a.”

Therefore, the use of the first and second metal films 30a and 30b permits an accurate contact by avoiding extraneous stress from being applied to the area formed with the contact terminals at the time of the test operation (e.g., see page 13, line 1 et seq).

Reconsideration and allowance of the independent claims 24 and 27 over the cited references to Dasse and Liu is respectfully requested. By the present Amendment, each of these independent claims 24 and 27 (corresponding to amended versions of the original independent claims 17 and 20) has been drafted to specifically define the relationship between the first and second metal films, the contact terminals and the electrodes of the semiconductor elements. More specifically, each of these independent claims specifically defines:

“wherein the electrical characteristics of each of the semiconductor elements are tested by pushing the first area surrounded by the first metal film while fixing a second metal film formed so as to surround the first metal film of the probe sheet thereby to make the plurality of the contact terminals contact with the electrodes of the semiconductor element to perform the testing.”

It is respectfully submitted that neither Dasse nor Liu teach or suggest this specific relationship between the first second metal film, the contact

terminals and the electrodes. Accordingly, reconsideration and allowance of the newly presented independent claims 24 and 27 over the combination of Dasse and Liu is earnestly solicited.

Reconsideration and allowance of the dependent claims is also respectfully requested. In each instance, these dependent claims define further features which, when considered in combination with the overall features defined in the parent claims 24 and 27, serve to even further define over the cited prior art. In particular, attention is directed to new claims 25 and 28 which define:

“wherein the first metal film has a linear expansion coefficient substantially the same as a linear expansion coefficient of the wafer.”


By virtue of this, the positional accuracy of the tip end of the contact terminal can be secured, even if the testing is carried out at high temperature. It is respectfully submitted that Dasse and Liu completely fail to teach or suggest this feature, particularly within the overall combination defined by the claims 25 and 28. Therefore, reconsideration and allowance of these dependent claims, as well as the other dependent claims, is earnestly solicited.

If the Examiner believes that there are any other points which may be clarified or otherwise disposed of either by telephone discussion or by personal interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

To the extent necessary, Applicants petition for an extension of time under 37 CFR §1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus,

LLP Deposit Account No. 01-2135 (Docket No. 500.45763X00), and please credit any excess fees to such deposit account.

Respectfully submitted,
ANTONELLI, TERRY, STOUT & KRAUS, LLP

By /Gregory E. Montone/ 
Gregory E. Montone
Registration No. 28,141

GEM/dks
1300 North Seventeenth Street, Suite 1800
Arlington, Virginia 22209
Telephone: (703) 312-6600
Facsimile: (703) 312-6666